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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/350,579	07/08/99	LANG G	05725.0435-0

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EXAMINER	
EINSMANN, M	
ART UNIT	PAPER NUMBER
1751	9

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.	Applicant(s)
09/350,579	Lang
Examiner	**Art Unit**
Margaret Einsmann	1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Apr 4, 2001*.

2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-68, 70-74, 76, 77, 79-106, 108, and 109* is/are pending in the application.

4a) Of the above, claim(s) *6, 9-13, 32-61, and 84-106* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-5, 7, 8, 14-31, 62-68, 70-74, 76, 77, 79-83, 108, and 109* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)

16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____

18) ☐ Interview Summary (PTO-413) Paper No(s). _____

19) ☐ Notice of Informal Patent Application (PTO-152)

20) ☐ Other:

DETAILED ACTION

Applicant's Amendments filed 4/4/01 have been entered. The pending claims are claims 1-68, 70-74,76,77,79-106, 108 and 109. Claims 6,9-13, 32-61, 84-106 have been withdrawn from consideration. Claims 1-5, 7,8,14-31, 62-68, 70-74, 76,77, 79-83, 108 and 109 are being examined in this action.

Election Requirement

1. Applicants affirmed the election of Group I with traverse. Applicant's election with traverse of the restriction/election requirement in Paper No. 8 is acknowledged. The traversal is on the ground(s) that it would not be a serious burden to examine the claims of group I and III together since they are classified in the same subclass.. This is not found persuasive because the basis of the restriction is that the product of group I, the hair dyeing composition can be made by a materially different apparatus Thus the two groups are patentably distinct. Applicant has not traversed that reason for restriction. Additionally the group III claims consist of several independent claims, all of which would need to be searches individually, in addition to the burden of searching the product claims of the elected invention.

The requirement is still deemed proper and is therefore made FINAL.

2. Applicant's election with traverse of the species of dyes of formula (I), and the nonionic amphiphilic polymers as defined in claims 1-5, 7-8, 14-31,62-83 and 107 in Paper No. 8 is acknowledged. The traversal is on the ground(s) that the office has improperly carved up the

persuasive because the examiner die not "improperly carve up a claim." The restriction was based on the fact that this application contains multiple species of the generic compounds, and that applicant must choose one species for the examiner to begin the examination. When the elected species is determined to be allowable, only then will other non-elected species be examined. In the instant case, we have not yet reached that point in the examination.

The requirement is still deemed proper and is therefore made FINAL.

Objection to Specification

The objection to the specification has been overcome by the cancellation of claim 107.

35 U.S.C. 112 Rejections

The rejection of the claims 69, 75, 78 and 107 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention has been overcome by the cancellation of those claims.

*Claim Rejections - **35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-5, 7-8, 14-19, 24, 31, 62-68, 70-74, 76,77,79-83, 108 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jones in view of Rondeau.

Jones, U.S. Patent No. 6,106,578, teaches thickened hair dyeing compositions which contain one or more dyeing agents, at least 0.1 wt% of a hydrophobically modified nonionic polymer (HNP), at least 0.1wt% of at least one associative agent, and water, see Abstract and col. 2, lines 61-67. The hair dyeing agents may be permanent, semipermanent, temporary, or mixtures thereof, and may be present in the claimed amounts, see col. 9, lines 42-55. Permanent dyes include oxidation bases and couplers as claimed, wherein color may be developed with an oxidant as claimed, see col. 9, line 57-col. 10, line 12. Semipermament and temporary dyes include azo dyes, basic dyes, and additional direct dyes as claimed, see col. 10, lines 22-35. The HNP is preferably a fatty alkyl hydroxyethylcellulose derivative or polyethoxylated urethane modified with a fatty chain as claimed (i.e. a nonionic amphiphilic polymer), see col. 4, line 16-col. 5, line 4. Jones teaches that the compositions may also contain other additives to enhance the properties of

the compositions, and that the compositions have pH's as claimed, see col. 12, lines 15-35 and col. 10, lines 42-44. Jones exemplifies various compositions which contain nonionic amphiphilic polymers, oxidation bases, couplers and oxidants in aqueous mediums as claimed, see Examples. Jones does not teach the specifically claimed cationic direct dyes, or the claimed sunscreens.

Rondeau, U.S. Patent No. 5,879,412, teaches compositions for dyeing hair which contain at least one oxidation base chosen from p-phenylenediamines, at least one coupler chosen from m-phenylenediamines, at least one cationic direct dye, and at least one oxidizing agent, see Abstract. Note that Rondeau's oxidation bases and couplers overlap in scope with those which may be present in Jones's compositions. Rondeau's cationic direct dyes include those of formula (I) as claimed, wherein Rondeau's preferred dye is equivalent to preferred dye (I31) as claimed, see col. 2, line 21-col. 3, line 64; and col. 6, line 30-col. 9, line 26. Rondeau teaches that it is known in the art to add direct dyes to oxidative dyeing compositions in order to vary the shades and obtain glints, see col. 1, lines 43-47. Rondeau teaches that the claimed cationic dyes result in various improvements over conventionally used direct dyes, particularly when used in the mixtures of the patentee, such as rich glints and good endurance properties, see col. 1, lines 54-66. Rondeau also teaches the addition of nonionic polymers and surfactants to the compositions, therefore suggesting the claimed direct dyes are compatible with Jones's required additives, see col. 10, lines 39-47.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a direct dye as claimed to the compositions of Jones, which contain oxidation bases,

couplers, oxidants and nonionic amphiphilic polymers as claimed, because Jones teaches that direct dyes, including azo dyes and basic dyes, may be used in admixture with the patentee's oxidation dyes, and Rondeau teaches that the claimed cationic direct dyes result in improved endurance and glints when added to oxidative hair dyeing compositions, absent a showing otherwise. Furthermore, Jones's compositions may contain the same mixtures of oxidation bases and couplers taught by Rondeau, and Rondeau teaches that the direct dyes are compatible with nonionic polymers and surfactants (Jones's required additives).

Claims 1-5, 7-8, 14-31, 62-68, 70-74, 76,77,79-83, 108 and 109 are rejected under 35 U.S.C. 103(a) as being unpatentable over de la Mettrie in view of Rondeau.

De la Mettrie, U.S. Patent No. 6,010542, teaches hair dyeing compositions which contain oxidation dye precursors, optional couplers, and at least one nonionic amphiphilic polymer containing a fatty chain and a hydrophilic unit as claimed, see Abstract. The dye precursors and couplers include those as claimed, and may be present in the claimed amounts, see col. 4, line 6-col. 7, line 28. De la Mettrie teaches that the compositions may also contain direct dyes in order to enrich the shades with glints, including azo dyes, see col. 7, lines 29-33. The oxidizing agents include those as claimed, see col. 8, lines 34-38. The nonionic amphiphilic polymer is preferably selected from a group which includes the various nonionic amphiphilic polymers as claimed, wherein the polymer may be present in the claimed amounts, see col. 3, line 22-col. 4, line 5. De la Mettrie teaches that the compositions may also contain other conventional additives, and that the compositions have pH's as claimed, see col. 8, lines 13-33 and 43-46. De la Mettrie

exemplifies a composition which contain a nonionic amphiphilic polymer, oxidation bases, coupler and oxidant in an aqueous medium as claimed, see Example 1. De la Mettrie does not teach the specifically claimed cationic direct dyes, or the claimed sunscreens.

Rondeau is relied above as teaching that the addition of the claimed cationic direct dyes of formula (I) to compositions for dyeing hair which contain at least one oxidation base, at least one coupler, and at least one oxidizing agent which may be the same as those present in de la Mettrie's compositions, results in various improvements over conventionally used direct dyes such as rich glints and good endurance properties. Rondeau is also relied upon as suggesting that the claimed direct dyes are compatible with de la Mettrie's nonionic polymers. Rondeau teaches that the cationic dyes should be used in the claimed amounts, see col. 9, lines 36-42.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a direct dye as claimed in the claimed amounts to the compositions of de la Mettrie, which contain oxidation bases, couplers, oxidants and nonionic amphiphilic polymers as claimed, because de la Mettrie teaches that direct dyes, including azo dyes, may be used in admixture with the patentee's oxidation dyes, and Rondeau teaches that the claimed cationic direct azo dyes result in improved endurance and glints when added to oxidative hair dyeing compositions in the claimed amounts, absent a showing otherwise. Furthermore, de la Mettrie's compositions may contain the same mixtures of oxidation bases and couplers taught by Rondeau, and Rondeau teaches that the direct dyes are compatible with nonionic polymers (de la Mettrie's required additives). The Office holds the position that the addition of a sunscreen agent to the

compositions of de la Mettrie as modified by Rondeau would have been obvious to those skilled in the art because de la Mettrie teaches that any conventional additives may be used, and sunscreens are conventional hair dyeing additives which provide the benefit of protection of the hair from sunlight.

Response to Arguments

3. Applicant's arguments filed 4/4/2001 have been fully considered but they are not persuasive regarding the above two rejections. Basically, applicant is arguing that the examiner made improper combinations of the references in each case. Regarding the rejection of Jones in view of Rondeau, applicant states that there is no suggestion or incentive to modify the teaching of Jones with the teaching of Rondeau. Applicant admits that Jones's composition contains one or more hair dyeing agents including permanent, temporary or semi-permanent dyes or combinations thereof. This generic teaching allows for the addition of any hair dye to the composition, which comprises the claimed polymers. Rondeau teaches at column 1 that it is well known to vary shades and provide glints by adding direct dyes to oxidation dyeing compositions, but the majority of direct dyes lack fastness. The dyes of Rondeau solve that problem. Thus it would have been obvious to add them to the composition of Jones for the benefits they provide: enhancing the shade, providing glints, while having improved fastness over known direct dye. Applicant states that there is no motivation to add the particular dyes of Rondeau. This office respectfully disagrees, pointing to the known benefits of the dyes of Rondeau over known direct dyes.

Additionally, it would have been prima facie obvious to add hair coloring dyes to any hair coloring composition as that is using them for their known purpose, and Rondeau teaches in col. 1 that it is conventional to add direct dyes to oxidation hair dyeing compositions. It is prima facie obvious to combine two compositions each taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose. See In re Kerkhoven,205 USPQ 1069,1072. Applicant further states that the combination does not suggest adding the particular dyes of Rondeau. The examiner does not understand this argument. Which dyes, then, would Rondeau suggest adding?

Regarding the rejection of the claims over de la Mettrie in view of Rondeau applicant argues that de la Mettrie does not teach the cationic direct dyes as claimed. He does not need to. Rondeau provides for that deficiency. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA

1971). In conclusion, al three references are concerned with the art of oxidative hair dyeing; all of the references teach additives to oxidative hair dyeing compositions; all of the references teach the benefits of adding the disclosed polymer and/or dye to compositions for oxidative dyeing of hair, making it prima facie obvious to combine the polymers of either Jones or de la Mettrie with the direct cationic dyes in the same composition.

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Margaret Einsmann whose telephone number is (703) 308-3826. The examiner can normally be reached on Monday to Thursday and alternate Fridays from 7:00 A.M. to 4:30 P.M. The fax phone number for this Technology Center is (703) 305-3599

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

MARGARET EINSMANN

PRIMARY EXAMINER 1751

May 22, 2001